



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,903	10/08/2003	Karen M. Kraus	10541-1762	6375
29074	7590	06/29/2005	EXAMINER	
VISTEON C/O BRINKS HOFER GILSON & LIONE PO BOX 10395 CHICAGO, IL 60610			LEE, GUNYOUNG T	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

22

Office Action Summary	Application No.		Applicant(s)	
	10/680,903		KRAUS ET AL.	
	Examiner		Art Unit	
	Gunyoung T. Lee		2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☒ Claim(s) 2,8,9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/8/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Abstract

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the legal term "said" is used in line 5. Correction is required. See MPEP § 608.01(b).

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "2-2" in Fig. 2; "50" in Fig. 4; and "9B-9B" in Fig. 9A. Corrected drawing

Art Unit: 2875

sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 2 is objected to because of the following informalities: the term "inner perimeter edge" in line 2 of claim 2 is not consistent with the original term "inner peripheral edge" in claim 1 line 5. Appropriate correction is required.
5. Claims 8 and 9 are objected to because of the following informalities: the term "outer perimeter edge" in line 1 of claim 8 and in line 1 of claim 9 is not consistent with the original term "outer peripheral edge" in claim 1, line 4. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-3, 6, 10, 11, 13, 14, 20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cookingham (US 5,531,181).

9. In regards to claims 1-3, 6, 10, 11, 13, 14, 20 and 25, Cookingham discloses an apparatus for illuminating instrument cluster pointers having:

- A first plate (Fig. 1, 12) having a thickness and defining opposed first and second surfaces;
- Portions of said plate (Fig. 1, 12) defining an outer peripheral edge and an inner peripheral edge defining a central region (14);

Art Unit: 2875

- A LED light source (Fig. 1, 54) located within said central region (14);
- Wherein said LED light source (Fig. 2, 54) is offset in said central region (14) with respect to said inner peripheral edge;
- A support (Fig. 1, 18, 42, 48) coupled to said plate (12) so as to support said plate relative to the instrument panel (28);
- Wherein, said support (Fig. 1, 18, 42, 48) includes a housing located at the center of the plate (Fig. 1);
- Wherein, said support (Fig. 1, 18, 42, 48) extends generally perpendicularly with respect to a plane defined by said plate (12).

10. In regards to claims 1-3, 6, 10, 11, 13, 14, 20 and 25, Cookingham does not explicitly disclose:

- Indicia formed into one of said first and second surfaces of a gage plate (Fig. 1, 12) (claims 1, 6);
- Wherein, said plate (Fig. 1, 12) is a transparent plastic place (claims 10, 11).

However, Cookingham acknowledges that it is well known in the art that an instrument cluster includes a face plate bearing indicia for dials and other displays and the face plate generally comprise a transparent polycarbonate plastic substrate (col. 1, lines 13-22). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide indicia into one of the first and second surfaces of a transparent polycarbonate plastic plate to carry effectively the light from a light source to the desired display areas through the indicia for an evenly distributed illumination of the displays.

11. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cookingham (US 5,531,181) as applied to claims 1 and 2 above, and further in view of Kalantar (US 6,848,799).

12. In regards to claims 4 and 5, Cookingham shows the invention substantially as claimed except for a circular array of the LED light source.

13. In regards to the circular array of the LED light source, Kalantar discloses an optical light guide member with a circular array of LED lights (Fig. 8, 24). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the circular array of LEDs of Kalantar for the illumination apparatus of Cookingham to provide high intensive lights to the transmitting plate for a bright and uniform illumination on the display area.

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cookingham (US 5,531,181) as applied to claim 1 above, and further in view of Williams (US 6,454,422).

15. In regards to claim 7, Cookingham shows the invention substantially as claimed except for etched indicia on a face plate.

16. In regards to the etched indicia on a face plate, Williams discloses backlit etched indicia formed on a transparent plate (col. 8, lines 12-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the etched indicia of Williams for the illumination apparatus of Cookingham to provide more

Art Unit: 2875

discernible indicia which pleases the driver especially in a vehicle equipped with a more advanced monitoring technology.

17. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cookingham (US 5,531,181) as applied to claim 1 above, and further in view of Hardesty (US 3,131,670).

18. In regards to claims 8 and 9, Cookingham shows the invention substantially as claimed except for an internally reflective outer perimeter edge with a beveled shape.

19. In regards to the beveled internally reflective outer perimeter edge, Hardesty discloses a illuminated moving hand instrument indicating devices having a pair of beveled edges (Fig. 1, 16, 18) each coated with light reflecting material (20, 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the beveled internally reflective edge of Hardesty for the illumination apparatus of Cookingham to provide recirculation within a transparent plate for a high intensity uniform light flux to the desired areas (indicia).

20. Claims 12, 15-18 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cookingham (US 5,531,181) as applied to claims 1 and 13 above, and further in view of Matumoto (US 6,302,551).

21. In regards to claims 12, 15-18 and 26, Cookingham shows the invention substantially as claimed except for:

Art Unit: 2875

- First and second surfaces of the plate are supported by said support so as to be spaced from any adjacent surfaces of the instrument panel (claim 12);
- A support extends generally parallel with respect to a plane defined by said plate (claim 15);
- A housing with a cavity encloses a stepper motor (claims 16, 26);
- A stepper motor is coupled to a pointer, said pointer being moveably positioned adjacent to said first face (claim 17);
- Display is at least one selected from the group consisting of a fuel gage, an oil pressure gage, an engine temperature gage, a speedometer, a tachometer, an audio face plate and a knob (claim 18);

22. In regard to claims 12, 15-18 and 26, Matumoto discloses a meter for vehicle having: the surfaces of a light guide plate (Fig. 11, 60A) supported by a support body (182, 27, 190, 101, 100); a support (182) extends generally parallel with respect to a plane defined by the light guide plate (60A); a stepper motor (Fig. 11, 22 and col. 11, lines 45-48); a pointer (24) coupled to the stepper motor (22). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the support, stepper motor and pointer as shown in the meter of Matumoto for the illumination apparatus of Cookingham to provide operation information, such as speed, pressure, engine temperature, to the driver more precisely for a proper response, which will increase the safety of the driver.

Art Unit: 2875

23. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cookingham (US 5,531,181) as applied to claim 1 above, and further in view of Ohta et al. (US 5,143,434).

24. In regards to claim 19, Cookingham shows the invention substantially as claimed except for a housing located centrally with respect to a plate.

25. In regards to the centrally located housing, Ohta et al. disclose a meter for an automobile having a centrally located housing (Fig. 1a) with respect to the plate (3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the centrally located housing of Ohta for the illumination apparatus of Cookingham to provide a display unit with less thickness to reduce the entire size of the instrument.

26. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cookingham (US 5,531,181) as applied to claim 1 above, and further in view of Bernhard (US 6,502,976).

27. In regards to claims 21 and 22, Cookingham shows the invention substantially as claimed except for an incandescent or florescent bulb as a light source.

28. In regards to the light source (incandescent or florescent bulb), Bernhard discloses an illumination apparatus with an illuminator which is selected from the group of incandescent lights, florescent lights, LEDs, fiber optic lights, and chemically illuminating material (col. 9, lines 51-54). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the light source

(incandescent or florescent bulb) of Bernhard for the illumination apparatus of Cookingham to provide high quality illumination with a conventional light source for maintenance cost of a display system.

29. Claims 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cookingham (US 5,531,181) as applied to claim 1 above, and further in view of Scardilli et al. (US 4,559,582).

30. In regards to claim 23, Cookingham shows the invention substantially as claimed except for an electroluminescent material as a light source.

31. In regards to the electroluminescent light source, Scardilli et al. disclose an indicator illuminated with electroluminescent lighting (Fig. 1, 21, 26). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the electroluminescent lighting of Scardillie et al. for the illumination apparatus of Cookingham to provide a more convenient and efficient technique for illuminating front face and moveable pointer at light frequencies which do not extend past (below) a predetermined limit.

32. Claims 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cookingham (US 5,531,181) and Scardilli et al. (US 4,559,582) as set forth above, and further in view of Sell (US 5,047,761).

33. In regards to claim 24, Cookingham and Scardilli et al. show the invention substantially as claimed except for a beveled inner peripheral edge of a face plate.

Art Unit: 2875

34. In regards to the beveled inner peripheral edge of a face plate, Sell discloses a pointer illuminated instrument having a beveled inner peripheral edge (Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the beveled inner edge of Sell for the illumination apparatus of Cookingham modified by Scardillie et al. to maximize the light entrance into the entering face of a light transmitting plate for a high intensity illumination with a uniform distribution on a desired area.

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Perry et al. show a metallized high intensity guage pointer having: an array of LED lights (Fig. 4, 26); a transparent body (Fig. 1, 22); a housing (28); a support (16); a pointer (34), a gauge plate with indicia (24).

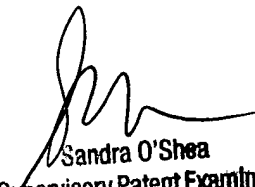
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gunyoung T. Lee whose telephone number is (571) 272-8588. The examiner can normally be reached on 7:30 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2875

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GTL
6/22/2005



Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800